

CLAIMS

What is claimed is:

1. A method for changing a number of active users in a multiuser call in a broadband telephony network, the network capable of establishing and deleting connections between the users, the method comprising:

for each user initially in an active status, providing a one-way connection with that initial active user as the destination and a one-way connection with that initial active user as an origin;

changing a number of active users in the multiuser call;

in response to the user number change, for one of the users having the active status, changing the destination of one of that maintained one active user's connections where that one active user is the origin while that active user remains as that one connection's origin; and

establishing and maintaining one-way connections as needed so that each of the active users having the active status has a one-way connection where that active user is an origin and that active user is a destination.

2. The method of claim 1 wherein after the establishing and maintaining one-way connections as needed, deleting any unused one-way connections.

3. The method of claim 1 wherein the establishing one-way connections is performed prior to changing the destinations.

4. The method of claim 1 wherein the destination changing connection maintains a bandwidth associated with the destination changing connection.

5. The method of claim 1 wherein the destination changing connection maintaining an assigned mini-slot associated with the destination changing connection.

6. The method of claim 1 wherein the destination changing connection changes its destination by changing a destination address associated with packets of the destination changing connection

7. A network for changing a number of active users in a multiuser call, the network comprises:

a plurality of communication gateways of a broadband network, each gateway capable of participating in a multiuser call with a changing number of users, each gateway comprises:

a processor for receiving commands from a call agent and changing characteristics of connections associated with the commands gateway in response to commands; and

the call agent for producing commands associated with connections of the multiuser call and in response to the change in the number of users, the commands direct one of the communication gateways to change the destination of a connection of the one gateway where that one gateway is maintained as an origin of that one gateway connection.

8. The network of claim 7 wherein the destination changing connection maintains a bandwidth associated with the destination changing connection.

9. The network of claim 7 wherein the destination changing maintains an assigned mini-slot associated with the destination changing connection.

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10. The network of claim 7 wherein the destination change is performed by changing a destination address associated with packets of that one gateway connection.

11. A call agent for changing a number of users in a multiuser call, the call agent comprising:

a call signaling block for producing commands associated with connections of the multiuser call, in response to the change in the number of users, the commands direct one user of the multiuser call to change the destination of a connection of the one user where that one user is maintained as an origin of that connection.

12. The call agent of claim 11 wherein the destination changing connection maintains a bandwidth associated with the destination changing connection.

13. The call agent of claim 11 wherein the destination changing connection maintains an assigned mini-slot associated with the destination changing connection.

14. The call agent of claim 11 wherein the destination changing connection changes its destination by changing a destination address associated with packets of the destination changing connection.

15. A communication gateway of a broadband telephony network, the communications gateway capable of participating in a multiuser call with a changing number of users, a call agent associated with the communication gateway produces commands for directing connections involving the communication gateway, the communication gateway comprising:

an RF connector and associated tuner for receiving commands and messages over connections of the network and for transmitting messages over connections of the network; and

a processor having an input configured to receive the received commands and in response to receiving commands associated with the number of users change, changing a destination of messages transmitted by the communication gateway over one of the transmitting connections while maintaining other characteristics of the connection.

16. The communication gateway of claim 14 wherein one of the other characteristics is a bandwidth of the one connection.

17. The communication gateway of claim 14 wherein one of the other characteristics is an assigned mini-slot associated with the one connection.

18. The communication gateway of claim 14 wherein the destination change of the one connection is performed by changing a destination address associated with packets of the one connection.